DOCUMENT RESUME

ED 325 930 EA 022 416

AUTHOR Achilles, C. M.; And Others
TITLE Organizing and Leading for Learning: The Interplay of School Reform and Restructuring with Preparation Program Reform and Restructuring.
SPONS AGENCY North Carolina Univ., Greensboro. School of Education.
PUB DATE Oct 90
NOTE 29p.; Paper presented at the Annual Meeting of the University Council for Educational Administration (4th, Pittsburgh, PA, October 26-28, 1990).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Administrator Education; Adult Education; *Andragogy; Cognitive Development; Context Effect; Curriculum; Educational Administration; Elementary Secondary Education; Instructional Improvement; Learning Theories; Models; Organizational Climate; *Problem Solving; *Professional Development; Program Development; *Public a Dministration Education; School Restructuring; *Theory Practice Relationship; Thinking Skills

ABSTRACT

A process model for the restructuring of educational administration preparation programs is described, with a focus on program content, delivery, and context. Recommendations are made for utilization of a problem-solving, andragogical approach and for structured administrator preparation programs based on the integration of theory and practice. Two figures illustrate the process. (44 references) (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED325930

ORGANIZING AND LEADING FOR LEARNING: THE INTERPLAY OF SCHOOL REFORM AND RESTRUCTURING WITH PREPARATION PROGRAM REFORM AND RESTRUCTURING

Material Prepared for the Fourth Annual

UCEA Get-Together. Pittsburgh, PA

10/27/90

A Paper Presentation: Session 6.5

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C. M. Achilles

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

C.M. Achilles, Professor and Chair
Dale Brubaker, Professor
Harold Snyder, Visiting Professor
Education Administration
School of Education
University of North Carolina at Greensboro
Greensboro, NC 27412-5001

Supported in part by the Collegium on School, Schooling and Education,
School of Education, UNCG,
Greensboro, NC 27412-5001

EA 022 416

ORGANIZING and LEADING for LEARNING: The INTERPLAY of SCHOOL REFORM and RESTRUCTURING with PREPARATION PROGRAM REFORM and RESTRUCTURING*

"The preparation of professional educational administrators is one of the weakest components of United States' education." (Guthrie, 1989, p. 228-229)

"Most programs for training school administrators range in quality from embarrassing to disastrous." (Griffiths, 1988, p. 6)

INTRODUCTION

Some "Down-Side" Issues

It might be easier to accept or shrug off such criticisms if they were from commissions of people outside education administration (EA). Unfortunately, they aren't; they are from leaders in the field. They are not alone -- theirs are not plaintive cries in the wilderness. These are general, broad-brush criticisms. . . What about the area that EA professors have quite direct control of -- research and inquiry? Here, surely, things are in better shape. Not really. Some have been concerned about the method and focus of research in the field of EA. [Note, for example, Boyan (1981, 1988), Bridges (1982), Erickson, (1979), Haller (1979), Haller and Knapp (1985), McCarthy, et al. (1988), Murphy, et al. (1983)].

> There is a long record of criticism regarding research in educational administration. It generally is viewed as being of low utility to practitioners, poorly conducted and based in an inappropriate methodological paradigm. There is no need here to repeat these oft-cited and quite valid criticisms (Guthrie, 1989, p. 229. Guthrie relies also on R. Muth's paper at UCEA, Cincinnati, 1988 titled "Reconceptualizing Training for Administrators and Leaders: Focus on Inquiry").

There have been and continue to be many papers and reports that address the content (or the suggested content) of education administrator (EA) preparation programs (The Knowledge Base). Some address the content issue directly by specifying areas of study [e.g., the National

---

*C.M. Achilles, Dale Brubaker and Harold Snyder, Professors, Education Leadership; School of Education; University of North Carolina at Greensboro, Greensboro, NC 27412-5001. Thanks to an anonymous reviewer who called our attention to "synergogy" and added a new dimension to this paper. This is a concept paper. Ideas to help the authors refine it are welcome. UCEA at Pittsburgh, 10/90.

Policy Board, or NPB (1989) recommendations of: "societal and cultural influences on schooling, teaching and learning processes and school improvement, organizational theory, methodologies of organizational studies and policy analysis, leadership and management processes and functions, policy studies and politics of education, moral and ethical dimensions of schooling" (p. 19)]; others address the content issue indirectly by specifying competencies or skills that an administrator should possess (e.g., the Assessment Center idea. See also Hoyle, et al., 1990). Content is notoriously slow to change, research results take considerable time to have much impact (if they have an impact), and ideas offered as "research" often are not really as research-based as some would believe. Culbertson (1988) addressed this problem.

> First, borrowed concepts tend to enter textbooks before they are adequately tested in school systems. The result is that such concepts may be used indefinitely in training programs even though their actual relations to school management and leadership practices remain unknown. (pp. 9-10. Emphasis added.)

Considerable work remains to be done to specify the knowledge base for education administration. Achilles and DuVall (1990, pp. 1-2) reviewed some criticisms of EA's knowledge base by citing some vocal critics:

> Daresh and Playko (1989) pondered the knowledge base and its relationship to mentoring. They concluded that maybe we couldn't use mentors in education administration, for they don't really have anything substantive to show to their proteges and protegees. 'The research base on administration is not clear enough to guide mentoring relationship' (p. 90). 'When there is little evidence of what good administrators ought to do, a handicap exists for those who might guide their colleague's practices' (p. 90).
>
> The knowledge base in education and education administration has been cussed, discussed and derided. Demerell (1985) called the absence of a body of its own knowledge 'Education's Smoking Gun.' The general low estate of education departments and faculties on major campuses seems to derive, at least in part, from educators' inability to define their own body of knowledge and specific methods of inquiry (Judge, 1982; Guthrie and Clifford, 1989). Derek Bok, President of Harvard, spoke to education's lack of a knowledge base of its own. To the extent that it is part of education, Bok's (1987) comments include education administration: 'Because they have neither a strong profession nor a distinctive body of knowledge to impart, education faculties have no firm anchor for their programs or curricula. Instead, external forces push them first in one direction, and then in another' (p. 46. Emphasis added).

At least three areas -- research in EA, program content and the knowledge base -- seem still unsettled as we consider developing new EA preparation programs. Even if there are changes or agreements in these three areas, can we expect EA preparation to change dramatically, as some have suggested is needed? Probably not. Content is but part of the program. A second and equally important element is the delivery/context of preparation. This issue (delivery/context) should lead to stronger, more meaningful ties between preparation and practitioners. For example, the National Commission on Excellence in Education Administration or NCEEA (Griffiths, et al., 1988) recommended a professional model for preparing education administrators, including more concentrated work and involvement with "the field." This does suggest elements of a profession, such as an agreed-upon body of knowledge and appropriate methods of inquiry to access and assess the body of knowledge. (Here are the research and content questions again!) A "professional model," however, also includes an appropriate delivery/method and relationship to the field as a part of context. Achilles and DuVall (1990) commented on this issue:

> If we aspire to the professional model, then the education administration knowledge base should be at least partly based on practice (grounded theory). We assert:
>
> 1. The knowledge base in other professions resides in the practice thereof.
>   a. In medicine, the knowledge includes not only pathology, pharmacology, and anatomy, but also the interface between the sciences and the patient.
>   b. In architecture, it is built not only on design and engineering, but also the interface of the sciences and the human being.
>   c. This "human" and practice condition exists similarly in other professions.
> 2. Only in "pure sciences" such as theoretical physics, metallurgy, nuclear chemistry, etc. is the human factor secondary. But even here the impact on humans is increasingly important.
>
> A knowledge base for a profession stands on at least two legs. One leg is the basic, theoretical underpinnings that relate concepts and ideas, help predict behaviors, and at least practically explain phenomena.
>
> The other leg is performance and practice. The application of concepts requires the processing of real-time feedback. It requires continuous adjustment, assessment of phenomena, and alteration of courses of action. Performance requires the practitioner to be a "scholar on one's feet." This type of knowledge cannot be acquired in the classroom; it requires a live setting with alive people. It includes a set of skills as well as abstract knowledge. We need to address this with a classic skill-building approach. Note the analogy to the pianist and the piano. One can study music history, style, interpretation,

harmony, but until one develops enough skill at the keyboard, the knowledge will not be evident (p. 3).

Given the preceding considerations, the time seems right for EA program developers to consider program context and new program-delivery models. Some are being used successfully in other professions. Development and testing of these models should proceed while content (knowledge base) issues are being resolved so we won't end up with new wines in old bottles. When people think of "restructuring" they often think of changes in organization and structure to accompany changing roles, rights and responsibilities. In this time of "school restructuring" EA needs attention to restructuring in this sense. Much like a grand jig-saw puzzle, many of the pieces are on the table. Some collective action is needed to put them together. How might the puzzle go together?

SOME PIECES OF THE PUZZLE

Andragogy/Pedagogy and Synergogy

The traditional preparation model for education administrators has been pedagogical in nature, proceeding from theory to practice, in classroom settings, with lectures and texts, and the professor providing the knowledge. Culbertson (1986) noted that two early texts on school administration -- William H. Payne's Chapters on School Supervision (1875) and A.N. Raub's School Management (1882) -- argued that administration was basically classroom management and could not be clearly distinguished from teaching. By the early 1900's scholars were attempting to describe administration and its functions to distinguish it from teaching. Theory in the early years (1875-1925) was prescriptive and normative. Historical analysis and the school survey were the main methods of inquiry. Professors lectured in classrooms to groups of students. Changing concepts of the adult learner -- and especially the adult professional as learner -- suggest that if preparation does not go from practice (concrete) to theory (abstract and generalizable), then at least there should be judicious interplay between the two models and databases. A concrete, practice-to-theory approach is built upon adult learning theory and

andragogy (instruction of adults) as described by, among others, Knowles (1980, 1984). Pedagogy literally means instructing youth. Andragogy means instructing adults (Knowles, 1980, 1984). The term adult pedagogy is an oxymoron. Further, Mouton and Blake (1984) suggest another alternative, "synergogy." They say that "synergogy is an alternative mode of education that should be examined in light of the benefits and limitations of two traditional approaches, pedagogy and andragogy" (p. xii). (See also Appendix A of this paper.) Synergogy employs major concepts of adult learning theory.

According to Knowles (1980, 1984) four key considerations in differentiating between pedagogy and andragogy are 1) the learner's self concept and teachers' concepts of learners, 2) role of experiences, 3) readiness to learn, and 4) orientation to learning. Children's education focuses on preparing them for the future. Adults have considerable backgrounds of experience that help them see relationships between new knowledge and prior knowledge. The preparation of adult professionals should build on prior experience as a first step to improved practice.

Knowles (1980) notes the differences. "Andragogy is based on the insight that the deepest need an adult has is to be treated as an adult, to be treated as a self-directing person, to be treated with respect. Andragogy is student-centered and problem-oriented" (p. 36).

Problem-Based Learning and Problem-Oriented Approaches

A problem-oriented approach to learning the practice leg of the EA database has been gaining momentum; some work is being done at such places as Stanford (E. Bridges) and Hofstra (Silver Center). Preparation for medical practice is undergoing dramatic Problem-Based Learning (PBL) changes at several major institutions.

A model of preparation built at least partially upon problems-of-practice has potential for guiding educators to understand and define education problems -- to move from reacting to externally defined problems (what Getzels, 1979, calls presented problems) to actively defining problems of education and accurately ("discovered problems"). Figure 1 shows three

1. PRESENTED PROBLEM SITUATIONS. A problem with a known formulation, known method of solution, and known answer is proposed by someone else and given to the problem solver. (This is the situation most prevalent in schools. Think of all of your classes and subjects. Given that the side of a square is four feet, what is the area?) The person applies technical problem-solving skills.

2. DISCOVERED PROBLEM SITUATION. The problem exists, but is formulated by the problem solver, not by someone else. It may not have a known formulation, known method of solution or a known solution. Why do children, at about grade 3 or 4, begin to seem to dislike school when almost all children are initially eager to attend school? Is this an American education phenomenon, or does it exist in other cultures?

3. CREATED PROBLEM SITUATIONS. No problem is evident until someone creates or invents it. An artist creates a painting. A poet expresses beauty through an ode. An advertising artist may be given a problem -- design an illustration for an advertisement. Another artist starts with a blank canvas and proceeds to create a problem which the same artist then moves to solve.

Figure 1. Three Categories of Problems (excerpted from Getzels, 1979, p. 11) to show one key difference in Problem Solving (Presented Problem) vs. Problem Finding (Discovered and Created Problem Situations).

of Getzel's problem types. Education leaders need to identify education problems and then seek powerful and creative solutions to them.*

One deterrent to advancements in the field (and the impact of research) is that many "problems" don't meet the criterion of problem. If you ask administrators to specify "problems" that they encounter, they may provide solutions stated as problems (we need more mathematics teachers), or statements of fact masquerading as problems (student attendance is only 89%). In the absence of clear problem definition, educators often succumb to "remedies" proposed by others. Administrators and professors studying problems of practice as teams of learners may be able to pose and frame important problems for educators to resolve. This idea extends to careful study of major dilemmas facing administrators, such as equality vs. quality, equity vs. equality, how to have equality with high levels of quality, etc.

Recent Work in Contextualized Learning, Situated Cognition and Anchored Instruction

As we consider restructuring -- changing the form and structure of EA preparation -- advancements in learning theory support some ideas that we already give lip service to in the field. We readily accept an internship as part of preparation (the Daresh and Playko, 1989, comments notwithstanding. What would you have your intern do?).

Brown, Collins, and Duguid (1989) argue that "activity and situation are integral to cognition and learning" (p. 32), and that we should consider "cognitive apprenticeships," approaches that embed "learning in activity and make deliberate use of the social and physical context" (p. 32). This approach is "more in line with the understanding of learning and cognition that is emerging from research" (p. 32). By recognizing the ways that situations

---

*E. Bridges (Personal Communication, 2/27/90) has noted that administrators may react to externally defined problems lacking known solutions or may react by redefining the problem. Granted. In the discussion here, problem redefinition could be considered a discovered problem. The other issue is more complex. The intent is that without sharp problem defining/posing skills, education administrators find themselves badgered by fads and commissions(ad nauseam) arguing that more math (or longer school hours or higher standards) will solve the "problem."

structure cognition, new understandings are now beginning to challenge the notion that knowing and doing can be separated.

The Cognition and Technology Group (1990) state that one aim of anchored instruction is to overcome Whitehead's (1929) problem of "inert knowledge" by "creating environments that permit sustained explorations by students and teachers. . ." (p. 3).*

Prestine and LeGrand (1990) relate ideas from cognitive learning theory directly to EA preparation. They note that "proponents of cognitive learning theories argue that learning advances through collaborative social interaction and the social construction of knowledge. . .not the rather individualized, isolated and decontextualized processes emphasized in most education settings." (p. 1). They underscore Shulman's idea of "the wisdom of practice" as a major source of a teaching knowledge base. After briefly making the case for situated cognition and social interaction, Prestine and LeGrand muse that "little effort is evident in linking such potentially powerful precepts to the professional preparation program to which such ideas may be most applicable, e.g., educational administration" (p. 3).

An important consideration for this paper is the potential for relating situated cognition to ways that we may reconfigure the delivery of EA preparation. Concepts behind situated cognition fit closely with elements of andragogy (Knowles, 1984) and synergogy (Mouton and Blake, 1984). They fit with the concept of a "professional model" in that they require relying upon understanding the value of knowledge from practice and "critical theory orientations toward the moral and ethical considerations of administration" (p. 4).

Several roles for the professor emerge: helping the student "generate new connections and give new meanings that reshape practice but this knowledge must be integrated into practitioners' everyday knowledge systems" (p. 4), helping the "expert practitioner in

---

*The Cognition and Technology Group (1989, p. 2) explain that inert knowledge "can usually be recalled when people are explicitly asked to do so but is not used spontaneously in problem solving even though it is relevant." They note that Whitehead made "the provocative claim that, in schools, information was particularly likely to be presented in ways that make it inert." (See also Appendix B.)

articulating and making overt the intuitive thought processes and accessing of professional knowledge inherent in the practice application" (p. 22), taking on the task of being a resource linker or provider, orchestrating group learning processes (e.g., in a synergogy mode) or helping the group in cooperative learning in the cognitive apprenticeship (p. 23), and helping the student understand the theoretical and research-based leg of the professional knowledge base (p. 23).

Prestine and LeGrand argue that it makes little sense to remove those who would be practitioners from the context and culture of practice as this "implies a separation of "thinking" about administration from the "doing" of administration" (p. 25). Achilles and Hughes (1972) have demonstrated the efficacy of a model for preparation that "pairs" a practicing administrator with a person preparing to enter administration and in a planned program that alternates periods of full-time study with full-time mentorship in dealing with the actual problems of administration.

The concepts of adult learning and ideas of cognitive apprenticeship (cooperative and collaborative learning) support the professional model of cohort groups and the idea that there may be a "cohesive and coherent progression of knowledge acquisition" (Prestine and LeGrand, p. 25) in such preparation, rather than a mish-mash of courses taken at a student's convenience. The cohort approach is becoming more and more evident in selected IHEs, often spurred by program reform and outside influences, such as the Danforth Foundation or the "Asheville Program" at UNCG (Brubaker and Snyder, 1989). The idea is not new. Recall that the former Education Professions Development Act (EPDA) programs of the late 1960's or the Cooperative Program in Educational Administration (CPEA) and other earlier efforts pioneered these ideas; other professions routinely use the cohort model in preparation.

Accepting these ideas means seeking alternative <u>times</u> for course offerings, such as extended weekend seminars (note the Texas A&M Professional Studies Doctorate, and some alternate delivery modes used by Nova and other institutions). The "major programmatic change though is that all courses must integrate the ideas of the cognitive apprenticeship, each

becoming field-based experiences that link conceptual, theoretic knowledge directly to practice" (Prestine and LeGrand, p. 26).

The idea of revising, restructuring and redirecting preparation programs in EA will not be easy, for moving into new domains will require professors to learn and use new methodologies, or revise their approaches. This is a difficult task, for as Dewey (1938) noted, what is in our minds limits and controls what we let in and contemplate:

> The way in which the problem is conceived decides what specific suggestions are entertained and which are dismissed; what data are selected and which are rejected; it is the criterion for relevance and irrelevancy of hypotheses and conceptual structures. (p. 138)

This task will require professors to do such things as link theoretic and practical knowledge, conduct research on practice, work as coaches and mentors rather than expert lecturers, etc. The reshaping (organizationally and conceptually) of preparation programs (context and delivery) can occur contemporaneously with work on establishing a common knowledge base (content) and formulating improved research/inquiry skills (evaluating the field and extending the knowledge base). Contrary to the expectations of some, the "restructuring" movement, a precursor to moving education and its reliance upon knowledge, values, morals and ethics to a higher plane in society, must influence not only public schools, but also the content, context and structure/delivery of preparation programs for education professionals.

Some "Common-Sense" (?) Concerns

Most candidates in EA preparation programs have considerable experience in schools; many work daily in schools with concerns and problems of schooling. Most enter EA preparation with a presupposed knowledge of education gained from work in education, preparation for teaching, and a long socialization in schools of 16 or more years of attending school. During initial EA preparation (often the master's level) it may make sense for people in groups to learn the elements of education law, the "language" of EA, finance, scheduling, organization and

administration theory, etc. in environments away from their education settings. Does this make as much sense at advanced levels? As people proceed through preparation for other professions (medicine, law) they get progressively closer and closer to their clients and the practice of the profession (Achilles, 1987). In education, however, the opposite seems true. Why? What is an appropriate mix of practice, theory and instruction-stretching technology in preparation programs? (A cynic might ask cui bono in the continuing standard emphasis on texts to the exclusion of contextualized learning.)

Today's EA students hear of "restructuring," of the need to "reinvent" education from top to bottom, and of the need to change schools and schooling because of "changing demographics." Are the demographics for EA preparation static? How can a professor get to know as much about restructuring as the teams of teachers and administrators struggling to implement the changes? [For an excellent discussion of school system culture vis-a-vis university culture for the preparation of school personnel, see Sarason (1990), especially pages 65-67.]

Potential for Experimentation and Growth: Improving Practice and Preparation

Preparation programs built at least partially from problems of practice (or study of exemplars of practice) will 1) develop a practice-oriented knowledge base, 2) build upon andragogy, and 3) forge local school-higher education links. A problem-oriented (problems of practice) approach allows participants to conceive of an effective leader as a reflective professional practitioner (Schon, 1989). Such a program will assist participants 1) to define and study actual problems encountered in education, 2) to consider related concepts, theories, models and practices, and then 3) to reflect upon the instrumental value of those elements for improving education. Equally with discipline-based, theory-derived knowledge and quantitative research methods, this training model will value 1) analytic skills, 2) intuition, 3) learning from practice and reflecting on practice as a method of developing part of a knowledge/skill base, 4) use of theory to explain, predict, verify, extend, and improve practice, 5)

contemplative action sharpened by studies of humanities and ethics, and 6) artful use of qualitative evaluation skills to guide the craft of administration.

An andragogical, synergogical and problem-oriented (or study of exemplary practice) approach has potential for establishing a database for instruction which derives at least partly from practice. Instruction in leadership built on the practice-driven knowledge base offers 1) the promise of education improvement as an outcome of instruction, 2) an opportunity to validate some theories, and 3) the vehicle of internship-like activities or theory/practice integrative activities as part of the training. Those improving their leadership skills can practice and hone them in the laboratory of their own settings, and through reflection, generalize and discuss the particulars with others as a means of understanding general applications. In the interplay of practice/theory--theory/practice modes in EA preparation there are three (or four) important levels that might be addressed. In skeleton form, these levels appear in Figure 2, a theoretic framework built in matrix form to show four steps or stages in learning and knowledge use. In this model a knowledge base can be derived primarily from practice and generalized through theory and include both knowledge and skill (which my be the artful application of elements of the knowledge base). Knowledge implies a level of conceptual control; skill is the translation of knowledge into useful action. There are two important skill levels: 1) the acquisition of the skill, and 2) the appropriate application of the skill. Knowledge can be expanded through study, contemplation, evaluation and reflection; skill can be improved through application, practice, evaluation and reflection. This belief leads to contemplation and use of elements of the "reflective practitioner" (Schon, 1989) concept in the preparation of leaders.

The model in Figure 2 offers direction. Typical programs go from theory to practice (B-A-C). As theory is not ahead of practice in many cases (e.g., in restructuring schools), new models might emphasize a knowledge base built upon sound practice and translated into preparation programs following the A-B-C format. Throughout the matrix are ideas about some processes that may be employed to help a person move from knowledge (knowing about or

Leadership and Preparation Elements	Learning and Change Dimensions with Selected Processes Knowledge & Conceptual Control	Skill Building	Transfer of Skill	Independent Practice & Growth	Potential Outcomes
(HOW) **A. Study of Practice.** Problem Identification and Analysis, Problem Posing. Separate Symptoms and Problems. Focus on Site-Specific Issues.	Self-Assessment. Reflection, Vision. Discrepancy Analysis. Site-Specific Org. & Problem Analysis. Nature of Problems.	Cognitive Apprenticeships Specific Practica	SEE "C" BELOW		Real or Discovered Education Problems that are Administratively Mutable
(WHAT) **B. Study of Theory.** Acquiring a Knowledge Base and Skills for Problem Solving and Improvement of Practice. Designing Improvement Strategies.	Reading Lecture	Self-Assessment Change Processes Evaluation Human Relations Communications Org. Development			Armementarium Necessary to Initiate & Evaluate Change & Improvement
C. Demonstration/Use of the Knowledge Base in a Leadership Setting; Evaluation of Results. Implement and Study Change (leader) Acts.	Observation of "knowledge in practice"	Active intervention in projects, tasks, etc.	Mentor-Teams Practice in New Settings. Work in Community & School. Self-Assessments.	Continuing Synergistic Model; Reflection & Sharing. Move to Evaluating & Using Data.	Improved Education Practice: New Concepts of School, Culture and Professional Practice.
The WHY issues of Ed. Admin. rely on values, morals, ethics. These are built on humanities, liberal education, human relations and normal etiquette (one should not be mean).					
D. School Commitment: A Directed & Planned Emphasis on Improvement	Restructure the Culture at the Setting. Work to Establish the New Expectation. Develop an Organizational "Safety Net" to Allow Person to Use New Ideas, Skills and Strategies. Emphasis on Client (Close to the Customer) and Improved Practice.				Restructured School/System to Accommodate New Ideas & Processes.

Figure 2. Model of progression of training showing three primary levels of emphasis (A,B,C) with selected examples. Level D shows school commitment and accommodation for new Activities. Traditional preparation programs follow the BAC Theory-to-Practice format; new models might try the ABC path, moving from Practice to Theory. An administrator must know what to do, how, to do it, and most important, why something should be done (Achilles, 1986).

conceptual control) to the acquisition and use of the knowledge (understood as skills and competencies). (This idea/model is in very initial stages. The authors welcome ideas, critique and assistance in developing it further.)

SOME CONCLUDING THOUGHTS

Recent research continues to show the importance of several key variables in school improvement: the leader, the organization's culture, and various context and input characteristics. Some context and input variables may be beyond the control of school administration to change (e.g., pupils from broken homes, or low birth weight babies of teen mothers). Nevertheless, there are many manipulable or administratively mutable variables that have promise to improve schooling -- the conditions and outcomes of formal education -- of learners. The preparation of leaders who have the potential to work effectively with these variables to guide education improvement is a major social task.

Education's leaders will need to know how to find, interpret and use important information to weave plausible scenarios of future conditions that will challenge educators. Important skills will be problem posing, information search, data synthesis and interpretation, and human relations abilities particularly in working with diverse cultures and groups. These skills will provide the "raw material" that the leader will use in persuasive communication with and training of colleagues and constituents. Skills in goal setting and change/change processes and guided practice in achieving goals (change) will be important leadership "tools of the trade." Other tools to help the leader may be problem definition models (discrepancy analysis, brainstorming and synthesis), conflict resolution and consensus-building approaches, delegation, human relations, evaluation expertise, and analysis ability (self-assessment, organizational analysis, etc.). Such experiences, tools and concepts can be derived from studying, analyzing and working with problems of practice (or from analyzing examples of exemplary practice) and then checking the results against research and theory. This begins to define the outlines of a knowledge base. This approach -- practice to theory -- has theoretic support but has been tried in structured ways too seldom in education.

Changing times, conditions and demographics require (demand) transformations of education and education's delivery system. This seems true of EA preparation content, context and delivery. Education is entering uncharted seas. Navigation through the shoals of change will

require creative leaders who possess clear visions for yet-to-be-determined goals. The change and growth of preparation programs demand no less. The continuing development of people is a legitimate and important task of education, and the development of top-quality leadership talent is education's ultimate challenge.

Other developments (e.g., situated cognition, etc.) are providing guidelines for ways to restructure preparation programs in EA toward the "professional model" where "model" means structure as well as content. As schools restructure, so should preparation programs. Indeed, think how much professors could help the school restructuring movement *if* they knew as much about it as those who are actually going through it IN PRACTICE. Is it too much to ask the professoriate and those in charge of EA preparation at least to be at the starting line with the rest of the contestants? We need a process of preparing education administrators that is self-renewing so it can adapt to the new content. Other advice for professors?

1. Study practice.
2. Relate classes and theory to practice.
3. Have fun and make preparation programs interesting.
4. Build a knowledge base equally from theory and practice.
5. Value studied change, experimentation and evaluation.

Summary

Ideas and concepts get into education and administration journals and textbooks more slowly than the underlying events occur in practice. That is, by the time something that occurs in schools gets analyzed, researched and then published, the phenomenon has a fairly good head of steam and is moving along. In this sense, preparation for school administrators must at least trail the first wave of important events. One way to learn is to observe something in practice. Better yet, practice something, reflect on that practice and then analyze and generalize that learning through serious study and careful research. We streamline our understanding through searching reflection and discussion.

If people subscribe to the above assumptions, then they may see why preparation of school administrators should consider situated learning. Persons in preparation programs should work directly in school environments. We should relate in a theoretical way the structure of a preparation program both to situated learning and theoretic learning; to learning from a study of practice and to learning from an understanding of theory and research. Both types of learning have legitimacy in preparation programs.

There has been an extended debate about the merits of qualitative and quantitative research. Qualitative researchers struggled to be heard; quantitative researchers continued to assert that theirs was the only way of knowing. Synthesizers argued that people could improve their knowledge by applying both qualitative and quantitative approaches, by understanding the extent of something and the quality of it. Gage (1989) contends that underlying assumptions of the two modes of inquiry are not so far apart that the results of each could not be combined to provide better understandings. Such it is, we believe, in use of knowledge from practice and from theory in the preparation of school administrators.

Prestine and LeGrange (1989) explain how situated cognition, or learning the context of a particular event, may be applied in education administration preparation. Most of us believe the old vocational education maxim: tell me and I'll forget; show me and I'll remember; involve me and I'll learn and understand.

For many years education administration attempted to be a "science." Recently we have begun to worry that we are alienating ourselves from our professional practitioners. Simultaneously there has been a push for "critical theory," for attention to learning from "the field," and for the place of "reflection on practice." These newcomers have not said that they should replace prior emphases (theory, science), but that there is a place for both. How can it come about? Can we develop a scientific understanding of this practical event?

REFERENCES

Achilles, C.M. (1987, Oct). The present is prologue: UCEA today. Paper at UCEA Annual Convention, Charlottesville, VA. October, 1987.

Achilles, C.M. (1986). The key triad: What? How? Why? Paper at SRCEA, Atlanta, GA: November. (ED 302957).

Achilles, C.M., & DuVall, L.D. (1990, August). The knowledge base in education administration: Did NCATE open a Pandora's box? Paper at National Conference of Professors of Education Administration (NCPEA), Los Angeles, CA: California State University at Los Angeles, 8/13/90.

Achilles, C.M., & Hughes, L.W. (1972, July). The paired administrator team concept: A promising administrator training model. Planning and Changing, 3(2), 45-50.

Achilles, C.M., & Hughes, L.W. (1971). Leadership for education in Appalachia project (LEAP). Knoxville, TN: The University of Tennessee. Unpublished paper.

Blumberg, A. (1988). The craft of administration. Boston: Allyn and Bacon.

Bok, D. (1987, May-June). The challenge to schools of education. Harvard Magazine, 85(5), 47-57, et seq.

Boyan, N.J. (1988). Handbook of Research in Educational Administration. NY: Longman.

Boyan, N.A. (1981, Feb) Follow the leader: Commentary on research in educational administration. Educational Researcher, 10(2), 6-13, 21.

Bridges, E.M. (1982). Research on the school administrator: The state of the art, 1967-1980. Educational Administration Quarterly, 18(3), 12-33.

Brown, J.S., Collins, A., & Duguid, P. (1989, Jan-Feb). Situated cognition and the culture of learning. Educational Researcher, 18(1), 32-41.

Brown, G., Markus, F., & Lucas, S. (1988-89). Acquired administrative competence: A survey of national distinguished principals. National Forum of Educational Administration and Supervision Journal, 1(2), 58-68.

Brubaker, D., & Snyder, H.R. (1989). The Asheville doctoral program story: Realizing a dream. Greensboro, NC: University of North Carolina at Greensboro.

Cognition and Technology Group at Vanderbilt. (1990, Aug-Sept). Anchored instruction and its relationship to situated cognition. Educational Researcher, 19(6), 2-10.

Coleman, D.C., & Achilles, C.M. (1987, Summer). An agenda for program improvement in education administration preparation. Planning and Changing, 18(2), 120-127.

Cranton, P. (1989). Planning instruction for adult learners. Toronto: Wall and Thompson.

Culbertson, J.A. (1988). Tomorrow's challenges to today's professors of educational administration. 1988 W.D. Cocking lecture to NCPEA. Kalamazoo, MI. August 16, 1988

Culbertson, J.A. (1986). Administrative thought and research in retrospect. In G. Johnston and C. Yeakey (Eds.), Research and thought in administrative theory (pp. 3-23). New York: University Press of America.

Culbertson, J.A., Farquhar, R., Gaynor, A., & Shibles, M. (1969). Preparing educational leaders for the 70's. Final Report, Project 8-0230. US HEW; c/o UCEA. (Now at Tempe, AZ: Arizona State University.

Daresh, J., & Playko, M.A. (1989, Summer). Teacher mentors and administrator mentors: Same track, different trains. Planning and Changing, 20(2), 88-96.

Demerell, R. (1985). Education's smoking gun. New York: Freundlich Books.

Erickson, D.A. (1979, March). Research on educational administration: The state of the art. Educational Researcher, 8(3), 9-14.

Gage, N.L. (1989, Oct). The paradigm wars and their aftermath. Educational Researcher, 18(7), 4-10.

Getzels, J. (1979). Problem finding and research in educational administration. In G.L. Immegart & W.L. Boyd (Eds.), Problem finding in educational administration (pp. 5-22) Lexington, MA: Lexington Books.

Griffiths, D.E. (1988). Educational administration: Reform PDQ or RIP (UCEA Occasional paper #8312). Tempe, AZ: UCEA at Arizona State University.

Griffiths, D.E., Stout, R.T., & Forsyth, P.B. (1988, August). Leaders for America's schools: The report and papers of the NCEEA. Berkeley, CA: McCutchan.

Guthrie, J.A., & Clifford, G.J. (1989, Jan). A brief for professional education. Phi Delta Kappan, 70(5), 380-385.

Guthrie, J.W. (1990). The evolution of educational management: Eroding myths and emerging models. In B. Mitchell & L. Cunningham (Eds.), Educational leadership and changing contexts of families, communities, and schools (pp. 210-231). Eighty-ninth Yearbook of the NSSE. Chicago, IL: University of Chicago Press.

Haller, E.J. (1979). Questionnaires and the dissertation in educational administration. Educational Administration Quarterly, 15(1), 47-66.

Haller, E.J., & Knapp, T.R. (1985). Problems and methodology in educational administration. Educational Administration Quarterly, 21(3, Summer), 157-168.

Hoyle, J.R., Glass, T., & Oates, A.D., Jr. (1990). General professional standards for the superintendency. Paper prepared for AASA. Draft.

Judge, H. (1982). American graduate schools of education: A view from abroad. New York: The Ford Foundation.

Knowles, M. (1980). The modern practices of adult education: From pedagogy to andragogy (revised edition). Chicago, IL: Follett Publishing Co.

Knowles, M. (1984). Andragogy in action: Applying modern principles of adult learning. San Francisco, CA: Jossey-Bass.

McCarthy, M.M., Kuh, G.D., Newell, L.J., & Iacona, C.M. (1988). Under scrutiny: The educational administration professoriate. Tempe, AZ: University Council of Educational Administration.

Mouton, J.S., & Blake, R.R. (1984). Synergogy. San Francisco: Jossey-Bass.

Murphy, J., Hallinger, P., & Mitman, A. (1983, Fall). Problems with research on educational leadership: Issues to be addressed. Educational Evaluation and Policy Analysis, 5(3), 297-305.

National Commission on Excellence in Educational Administration. (1987, March). Leaders for America's schools. Tempe, AZ: UCEA at Arizona State University.

National Policy Board for Educational Administration. (1989, May). Improving the preparation of school administrators: An agenda for reform. Charlottesville, VA: NPB at the University of Virginia.

Perkins, D.N., & Salomon, G. (1989, Jan-Feb). Are cognitive skills context-bound? Educational Researcher, 18(1), 16-25.

Pitner, N. (1988). Training of the school administrator: State of the art. In D. Griffiths, R. Stout, & P. Forsyth (Eds.), Leaders for America's schools: Final report and papers of the National Commission on Excellence in Educational Administration. San Francisco, CA: McCutchan.

Prestine, N.A., & LeGrand, B. (1990). Cognitive learning theory and the preparation of educational administrators: Some implications. Paper at AERA. Boston, MA. April 19, 1990.

Sarason, S. (1990). The predictable failure of educational reform. San Francisco: Jossey-Bass.

Schon, D.A. (1989). Professional knowledge and reflective practice. In T. Sergiovanni and J.H. Moore (Eds.), Schooling for tomorrow. Boston, MA: Allyn and Bacon.

LB
1051
M7365
1984

Synergogy

A New Strategy for Education, Training, and Development

Jossey-Bass Publishers
San Francisco • Washington • London • 1984

H-1

for shared teaching."* Synergogy is a systematic approach to learning in which the members of small teams learn from one another through structured interactions; thus the idea of synergy in learning. Challenge and stimulation are created through social situations under which real as well as felt needs for learning can be satisfied. The instructor or learning administrator provides educational materials from which knowledge or insights can be acquired and creates designs –instructions for team action—that stimulate learning.

Synergogy is an alternative mode of education that should be examined in the light of the benefits and limitations of two traditional approaches, pedagogy and andragogy. Pedagogy is the most standard classroom model: an instructor who is an expert in the subject under study lectures, gives assignments, tests students' achievement, and so forth. In brief, the teacher teaches and the learners passively absorb whatever they can. A key advantage of pedagogy is that it permits codified knowledge to be presented in an orderly manner. Its chief disadvantage, however, is that students are often passive and unmotivated. Andragogy (meaning "adults teaching other adults") posits a different role for the instructor. The teacher serves as a facilitator or catalyst for the learners' activities. An advantage of andragogy is that learners' motivation is enhanced through greater responsibility for and involvement in learning. But andragogic methods are often situation-dependent and cannot be applied to codify or standardize information for mass use. Synergogy builds on the best features of pedagogy and andragogy while avoiding the limitations associated with each. It does so by enabling learners to acquire codified knowledge under conditions that arouse their involvement and commitment.

This book is the first comprehensive orientation to synergogy, a presentation of its assumptions, methodologies, and applications, as well as the responses of those who have used it. We began this work thirty years ago when, as professors of so-

25

26

Synergogy as an Alternative

Synergogy provides an alternative to both pedagogy and andragogy, seeking to avoid the weaknesses of both: the role of authority in pedagogic settings and the excessive reliance on the student already knowing what he or she needs to know in andragogic settings. At the same time synergogy preserves the strengths of these two approaches: the role of the expert in providing authoritative subject matter (in the form of learning designs) about the topic to be studied and the proactive involvement of the learner in being responsible for learning.

Synergogy thus provides a systematic framework for approaching the problems encountered in education, training, and development. Its four fundamental differences from other approaches involve: (1) replacing authority figures with learning designs and instruments managed by a learning administrator; (2) enabling learners to become proactive participants who exercise responsibility for their own learning; (3) applying to education the concept of *synergy*, in which the learning gain that results from teamwork exceeds the gain made by individuals learning alone; and (4) using learners' colleague affiliations to provide motivation for learning. Specific sources of social motivation include each learner's desire to increase his or her personal effectiveness and effectiveness as a team member, to collaborate with and gain approval from one's colleagues, to participate in order to increase the likelihood of team success and to exercise personal autonomy in learning.

The mention of *motivation* returns us to the starting point of this chapter: effective learning requires that the learners be motivated. Synergogy presents designs for organizing learning environments so as to avoid conditions that decrease motivations for learning and to provide situations that reinforce individuals' desire to learn by helping one another.

reasons for them. The approach to comparison learning applied to subjective processes is often experienced by learners as freeing them from constraints they previously had not recognized.

Table 1 provides examples of subjects appropriate to each of the four designs.

Table 1. Synergogic Designs and Sample Subject Matter.

General Subject	*TED or TMTD (Knowledge Acquisition)*	*PID (Skill Development)*	*CAD (Attitude Study)*
Computers	Tasks that can be performed by a word processing system.	Writing reports on a word processor	Management's attitudes toward the computerized office and their effect on productivity
Leadership	Comparative study of management's philosophy of leadership in Japanese and American corporations	Exercising authority and leadership in the office	Styles of leadership that provoke antiauthoritarian noncompliance
Firefighting	Characteristics of the four major types of fires	Techniques for fighting each of the four major types of fires	Fears about fires and overcoming them
Modern Architecture	Principal styles of modern architecture	Drawing blueprints and visualizing them in three dimensions	Design factors that promote public use of malls and plazas
Multiple-Choice Test Construction	Theories of testing and the statistical validity of multiple-choice tests	Constructing a test for junior high school algebra classes	Student views of multiple-choice tests: learning experience or anxiety-producing torment?

APPENDIX B

SOME IDEAS ON INERT IDEAS AND PREPARATION PROGRAMS

The idea of inert ideas merits some consideration. Numerous studies (e.g., Pitner, 1988; Brown, et al., 1988) have shown that practicing administrators not only claim that they don't get their useful information in higher education classes (Brown, et al., 1988), but some denigrate and ridicule Education Administration (EA) preparation programs (Pitner, 1988). These persons overwhelmingly explain that they get their useful information while at work -- that is, on the job and not in classrooms. "It is difficult to ignore the testimony of school administrators that their training programs are far from adequate in preparing them to resolve the problems they face" (Pitner, 1988, p. 368). "Fewer than 2 percent of elementary school principals credit their success as school administrators to their graduate course work" (Pitner, p. 376). Pitner notes that among practitioner complaints of preparation programs is that "programs do not provide the opportunity for applying theoretical knowledge to actual situations" (p. 378). Perhaps professors of Education Administration feel absolved by Pitner's finding: "The denigration of professional training by practitioners is by no means confined to the field of school administration" (p. 378). These findings raise questions about the content, context and delivery of preparation programs in institutions of higher education (IHE). Inert ideas? Here's Whitehead (1929).

> In the history of education, the most striking phenomenon is that schools of learning... exhibit merely pedantry and routine. The reason is that they are overladen with inert ideas. Education with inert ideas is not only useless, it is, above all things, harmful. . . . (p. 13)

To Whitehead, "Education is the acquisition of the art of the utilization of knowledge" (p. 16. Emphasis added). Without knowledge of using knowledge, knowledge is not much use, or as Whitehead says, "Knowledge does not keep any better than fish" (p. 102).

If the "stuff" of regular IHE preparation programs for EA is not particularly useful to those who would practice EA, we might begin with the notion that EA preparation programs are, like other IHE programs, composed mostly of inert ideas. If so, what must program designers do to relate the ideas and knowledge to usefulness? Can we design programs that make use of situated cognition, cognitive apprenticeships, or anchored instruction? And can we do it so that there is some excitement and life in our programs? Note Whitehead (1929) once more:

> The justification for a university is that is preserves the connection between knowledge and the zest for life. . . The university imparts information, but it imparts it imaginatively. At least, this is the function which it should perform for society. A university which fails in this respect has no reason for existence. (p. 97)